

THERMOPLASTIC POLYMER EXTRUSION BENDING

Abstract of Disclosure

Methods for bending preformed thermoplastic extrusions having at least one cavity comprise filling at least one of the extrusion cavities with polymer foam and curing the foam within the filled cavity. An extrusion is heated to allow plastic deformation and then smoothly bent over a mandrill to impart a desired curved shape. Following cooling to below the extrusion's plastic deformation temperature on the mandrill, smoothly curved extrusions are removed for cooling to room temperature. Cured polymer foam within an extrusion cavity resists distortion of the cavity during the bending process.

Figure

1000 900 800 700 600 500 400 300 200 100 0